

Notice of Allowability

Application No.

10/068,503

Applicant(s)

YAMADA, SEIYA

Examiner

Michael V. Battaglia

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 04 April 2004.
2. ☒ The allowed claim(s) is/are 4-23 (now renumbered as 1,6,11,13,14,19,7,4,5,8,10,9,12,15-18 and 20 respectively).
3. ☒ The drawings filed on 05 February 2002 and 04 April 2005 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Reasons for Allowance

Claims 4-23 are allowable over the prior art of record. Claims 4-9 and 12-18 are allowable for the reasons specified in the previous Office action and Applicant's remarks filed April 4, 2005.

In regard to claims 10 and 19-22, none of the references of record alone or in combination suggest or fairly teach a method of recording a signal on an optical disc by irradiating an optical beam according to a strategy which is stepwise updated by a given step amount, the method comprising: successively detecting a linear velocity of the optical disc relative to the optical beam in realtime basis; successively generating the strategy according to the detected linear velocity every time the linear velocity of the optical disc is detected; providing a plurality of storage areas, each being capable of memorizing the strategy successively generated; rewriting one of the storage areas every time the strategy is generated until the strategy is updated by a given step amount and then rewriting another of the storage areas every time the strategy is generated while leaving said one storage area to hold the updated strategy, thereby updating the strategy through the plurality of the storage areas; detecting a defect of the optical disc using the optical beam reflected back from the optical disc; selecting the storage area holding the updated strategy to read therefrom the updated strategy while allowing the rewriting of another storage area; generating a pulse waveform shaped according to the updated strategy held in the selected storage area; and irradiating the optical beam in response to the generated pulse waveform to record the signal on the optical disc, wherein a regular strategy is generated when no defect exists on the optical disc and a substitute strategy is generated when a defect exists on the optical disc, an updated regular strategy and an updated substitute strategy are held separately from each other in the storage areas, and the storage area holding the updated substitute strategy is selected when the defect is detected on the optical disc.

In regard to claims 11 and 23, none of the references of record alone or in combination suggest or fairly teach a computer program for use in a disc apparatus having a processor for recording a signal on an optical disc by irradiating an optical beam according to a strategy which is stepwise updated by a given step amount, the computer program being executable by the processor for enabling the disc apparatus to perform a process comprising: successively detecting a linear velocity of the optical disc relative to the optical beam in realtime basis; successively generating the strategy according to the detected linear velocity every time the linear velocity of the optical disc is detected; providing a plurality of storage areas, each being capable of memorizing the strategy successively generated; rewriting one of the storage areas every time the strategy is generated until the strategy is updated by a given step amount and then rewriting another of the storage areas every time the strategy is generated while leaving said one storage area to hold the updated strategy, thereby updating the strategy through the plurality of the storage areas; detecting a defect of the optical disc using the optical beam reflected back from the optical disc; selecting the storage area holding the updated strategy to read therefrom the updated strategy while allowing the rewriting of another storage area; generating a pulse waveform shaped according to the updated strategy held in the selected storage area; and irradiating the optical beam in response to the generated pulse waveform to record the signal on the optical disc, wherein a regular strategy is generated when no defect exists on the optical disc and a substitute strategy is generated when a defect exists on the optical disc, an updated regular strategy and an updated substitute strategy are held separately from each other in the storage areas, and the storage area holding the updated substitute strategy is selected when the defect is detected on the optical disc.

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Conclusion

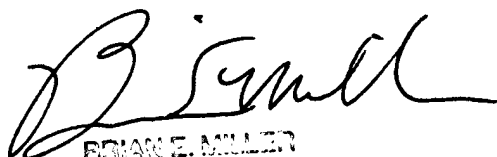
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V. Battaglia whose telephone number is (571) 272-7568. The examiner can normally be reached on 5-4/9 Plan with 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael Battaglia



BRIAN E. MILLER
PATENT EXAMINER